

REMARKS

Claims 1-15 were originally filed in the application. Claims 16-21 were added in amendments. Claims 2-4 and 9 were previously withdrawn from consideration. Claims 1, 5-8 and 10-21 are rejected in the Office Action. Claims 1, 5-8, and 10-21 are pending.

In the Office Action, claims 1, 10, and 19 are rejected under 45 USC § 102(b) as being anticipated by (1) Wenstrom, Jr., (2) Hildwein, et al., (3) Wellner, et al., (4) Ternamian, or (4) Bedi.

Wenstrom, Jr. discloses a cannula system for arthroscopic or laparoscopic surgery generally comprising a guide rod, a cannula housing, an obturator, and a dam assembly. Typically the surgical site is either irrigated or inflated. The dam assembly prevents all but minimal leakage from the surgical site whether or not an instrument is inserted through the cannula.

In contrast, claim 1 of the present invention is drawn to an indwelling intravascular catheter for insertion through the bodily tissue and terminating in a vessel of a medical patient. Unlike the Wenstrom, Jr. device, the catheter of claim 1 allows fluids to be drawn from, or introduced into, the vessel. Claim 1 includes the requirement that the cannula is for "extending into and terminating in the vessel." Such use is inconsistent with the description provided by Wenstrom, Jr. of his cannula system. and, in fact, the Wenstrom, Jr. device would not be suitable for such use.

Further still, the present invention is drawn to an indwelling catheter which includes a textured portion which assists in restraining the body in place so as to allow fibroblast growth and adhesion unto and within the texture during the time in which the body is indwelling in the patient. In contrast, the threads of Wendstrom, Jr. are intended to allow the cannula to be "screwed" into the bodily tissue of the patient only during the actual period of the surgery.

Hildwein, et al. discloses a flexible endoscopic surgical port comprising a trocar tube or cannula made partially or entirely of flexible material which can be inserted into a body wall at an intercostal location to allow the insertion and manipulation of endoscopic surgical instruments within the thoracic cavity. As with the disclosure of Wenstrom, Jr., Hildwein, et al. does not disclose intravascular use and is simply not suitable for such use. In fact, Hildwein only discloses insertion of a surgical port into the thoracic cavity. Further, Hildwein discloses a device which is inserted and removed as part of a surgical operation, as opposed to the indwelling device of claim 1 of the instant application.

Wellner, et al. discloses a hydrocephalic drainage valve for insertion through the skull of a fetus, intrauterine. Like the devices of Windstrom, Jr. and Hildwein, et al., the device of Wellner, et al. is simply not an indwelling intravascular device. There is no disclosure of insertion of the Wellner, et al. device into a vessel and, because it operates in a check-valve type fashion, it would not allow the transfer of fluids into and out of the vessel. The Wellner, et al. device terminates in the cranial cavity of a fetus, not in a vessel.

Ternamian discloses a rotational entry cannula which can gain entry to a body cavity without the use of a trocar. Like Wenstrom, Jr. and Hildwein, et al., Ternamian discloses a cannula for maintaining an opening during endoscopic surgery; Ternamian has no disclosure of intravascular use and is simply not suited for such use; Ternamian terminates in a cavity rather than in a vessel; and further, the Ternamian device is for temporary use during surgical procedure as opposed to indwelling as in the present invention.

As discussed with respect to Wenstrom, Jr., the threaded portion of Ternamian is not the same as the textured surface of Applicant's claim 1, which assists in restraining the body in place so as to allow fibroblast growth and adhesion unto and within the texture during the time in which the body is indwelling in the patient.

Bedi discloses an insert for a shielded trocar. The obturator point is shielded immediately after the point has perforated the tissue. After insertion through the tissue, the obturator is removed leaving the trocar tube or cannula as an accessway to the body cavity during endoscopic surgery.

Like Wenstrom, Jr, Hildwein, et al., and Ternamian, Bedi discloses a cannula for maintaining an opening during endoscopic surgery; Bedi has no disclosure of intravascular use and is simply not suited for such use; Bedi terminates in a cavity rather than in a vessel; and further, the Bedi device is for temporary use during a surgical procedure as opposed to indwelling as in the present invention.

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As discussed with respect to Wenstrom, Jr. and Ternamian, the threaded portion of Bedi is not the same as the textured surface of Applicant's claim 1, which assists in restraining the body in place so as to allow fibroblast growth and adhesion unto and within the texture during the time in which the body is indwelling in the patient.

Claim 10 is drawn to an intravenous stent. As discussed with regard to claim 1, none of the references cited in the Office Action disclose intravenous use and simply are not suited for such use. All of the cited references are for gaining access to a body cavity rather than to a vessel. Further, threaded surfaces which allow a surgical port to be screwed into the bodily tissue are structurally not the same as the textured surface required by claim 10, which assists in restraining the body in place so as to allow fibroblast growth and adhesion unto and within the texture during the time in which the body is indwelling in the patient.

Like claims 1 and 10, claim 19 is drawn to an intravascular device. As discussed with regard to claim 1, none of the references cited in the Office Action disclose intravascular use and are simply not suited for such use. All of the cited references are for gaining access to a body cavity rather than to a vessel. Further, claim 19 requires contact between a severed vessel and the interface which contains the textured surface. Certainly this requirement is not met in any of the cited references.

In light of the foregoing, Applicant submits that claims 1, 10, and 19 are in condition for allowance. Reconsideration and allowance of claims 1, 10, 19 is respectfully requested.

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In the Office Action, claims 5-8, 11-18, and 20-21 are rejected under 35 USC § 103(a) as being unpatentable over Hildwein, et al. in view of Hildebrandt, Hunt, et al., Bedi, et al., Ternamian, Wenstrom, Jr., Ciaglia, et al., Hunt, et al., Ju, and O'Connor, et al. Hildwein, et al. is cited as disclosing a cannula extending into and terminating in a vessel. This is simply not the case. Hildwein, et al., along with the other references cited with regard to claims 1, 10, and 19, disclose a cannula terminating in a body cavity.

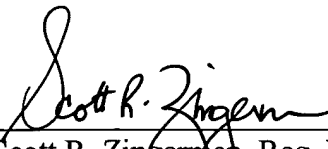
Claims 5-8 and 16-18 depend from claim 1 and, at least for the reasons stated with regard to claim 1, are likewise in condition for allowance. Claims 11-15 depend from claim 10 and, at least for the reasons stated with regard to claim 10 are likewise in condition for allowance. Claims 20-21 depend from claim 19 and, at least for the reasons stated with regard to claim 19, are likewise in condition for allowance. Reconsideration and allowance of claims 5-8, 11-18, and 20-21 are respectfully requested.

No additional fee is believed to be due. However, if any fee is made payable by the filing of this paper, please consider this our authorization to charge the Deposit Account of the undersigned, No. 06-0540.

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Respectfully submitted,

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